

What is claimed is:

1 1. An application operable on a computer adapted to  
2 communicate using at least an IPX/SPX protocol, said  
3 application comprising:

4 means for accessing a table for storing a plurality of  
5 IPX/SPX network segment addresses and the number of hops each  
6 segment is from the computer accessing said table;

7 IPX/SPX Routing Information Protocol (RIP) request packet  
8 sending means adapted to transmit an RIP request packet  
9 across an IPX/SPX network;

10 IPX/SPX Routing Information Protocol (RIP) response packet  
11 receiving means adapted to receive RIP response packets from  
12 within a pre-determined number of network hops and to store  
13 the network segment addresses and the number of hops each  
14 segment is from the computer contained in said RIP response  
15 packets in said table;

16 IPX/SPX broadcast means responsive to an application request  
17 to transmit an application defined packet to network segments  
18 within a pre-determined number of hops stored in said table.

1 2. An application according to claim 1 wherein said  
2 application is a multi-platform Internet browser adapted to  
3 communicate using a TCP/IP protocol and further comprising:

4 means, responsive to a domain name server (DNS) response  
5 indicating failure to locate a web server corresponding to a  
6 uniform resource locator (URL), for causing said IPX/SPX  
7 broadcast means to transmit a name request for an IPX/SPX  
8 server providing a service corresponding to said URL; and

9 means, responsive to receipt of a response to said name  
10 request containing an IPX/SPX address of an IPX/SPX server,  
11 for relaying said address to said application enabling  
12 peer-to-peer communication between said application and said  
13 IPX/SPX server.

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Routing Information Protocol (RIP) request packet sending means is adapted to periodically transmit said RIP request packet across an IPX/SPX network.

5. An application according to claim 1 comprising:

means for causing said IPX/SPX broadcast means to transmit a name request for an IPX/SPX server providing a service; and

means, responsive to receipt of a response to said name request containing an IPX/SPX address of an IPX/SPX server, for relaying said address to said application enabling connection oriented peer-to-peer communication between said application and said IPX/SPX server.

6. An application as claimed in claim 5 wherein said application is adapted to communicate using a TCP/IP protocol and further comprising:

means, responsive to no reply being received for said name request, for transmitting a TCP/IP name request for a TCP/IP server providing said service.

1 7. An application as claimed in claim 1 wherein said  
2 computer is a multi-platform router also adapted to  
3 communicate using a TCP/IP protocol, said router comprising:

4 means, responsive to a domain name server (DNS) response for  
5 a client indicating failure to locate a web server  
6 corresponding to a uniform resource locator (URL) required at  
7 said client, for causing said IPX/SPX broadcast means to  
8 transmit a name request for an IPX/SPX server providing a  
9 service corresponding to said URL; and

10 means, responsive to receipt of a response to said name  
11 request containing an IPX/SPX address of an IPX/SPX server,  
12 for relaying said address to said client enabling peer-to-peer  
13 communication between said client and said IPX/SPX server.

14 8. An application as claimed in claim 1 wherein said computer  
15 is a multi-platform router also adapted to communicate using a  
16 TCP/IP protocol, said router comprising:

17 means, responsive to a domain name server (DNS) request from a  
18 client, for causing said IPX/SPX broadcast means to transmit a  
19 name request for an IPX/SPX server providing a service  
20 corresponding to said URL; and

means, responsive to receipt of a response to said name request containing an IPX/SPX address of an IPX/SPX server, for relaying said address to said client enabling peer-to-peer communication between said client and said IPX/SPX server.

9. A multi-platform application as claimed in claim 1 wherein said computer is a server.

10. A computer program product comprising computer program code stored on a computer readable storage medium for, when executed on a computing device, communicating using at least an IPX/SPX protocol, the program code comprising the application of claim 1.

11. In a computer connected to a network, a method for communicating using at least an IPX/SPX protocol, comprising the steps of:

transmitting a Routing Information Protocol (RIP) request packet across an IPX/SPX network;

receiving one or more RIP response packets from within a

7 pre-determined number of network hops;

8 storing in a table a plurality of IPX/SPX network segment  
9 addresses and the number of hops each segment is from the  
10 computer accessing said table contained in said RIP response  
11 packets; and

12 responsive to an application request, transmitting an  
13 application defined packet to network segments within a  
14 pre-determined number of hops stored in said table.

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